

ABSTRACT OF THE DISCLOSURE

A control valve system of a variable displacement swash plate type compressor for use in a heating and cooling air conditioner, which includes a throttling valve provided in a refrigerating circuit, a constant differential pressure valve arranged to open when a differential pressure between upstream and downstream pressures of the throttling valve reaches a predetermined value, thereby introducing compressor discharge gas to a crank chamber, external information detecting device for detecting external information such as cooling load or vehicle running state, and controller for determining an opening of the throttling valve based on the external information, and which is capable of performing a stable feedback control of the discharge capacity in a range from a small discharge capacity to a large discharge capacity, and suppressing the decrease in compressor efficiency at large discharge capacity.